Installing MacBook Core Duo Logic Board

Tools used in this guide
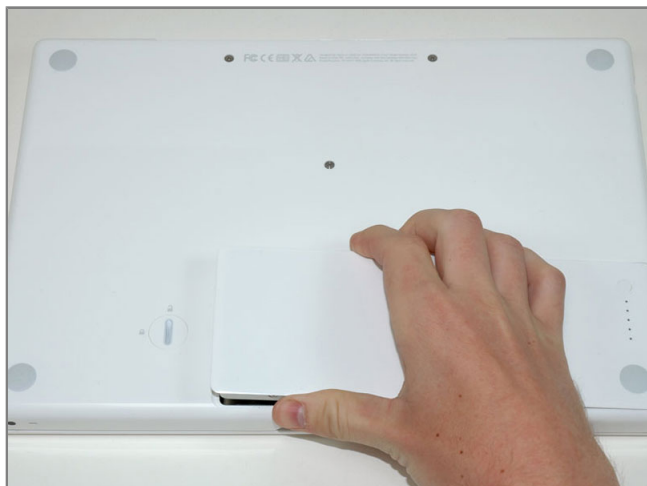- Coin (1)
- Phillips #00 Screwdriver (1)
- Spudger (1)

How to reach the logic board.
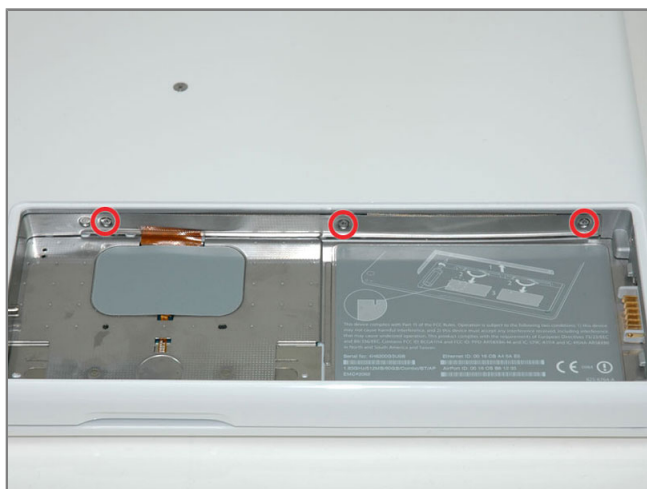
www.iFixit.com

Step 1 - Battery

- Use a coin to rotate the battery-locking screw 90 degrees clockwise.
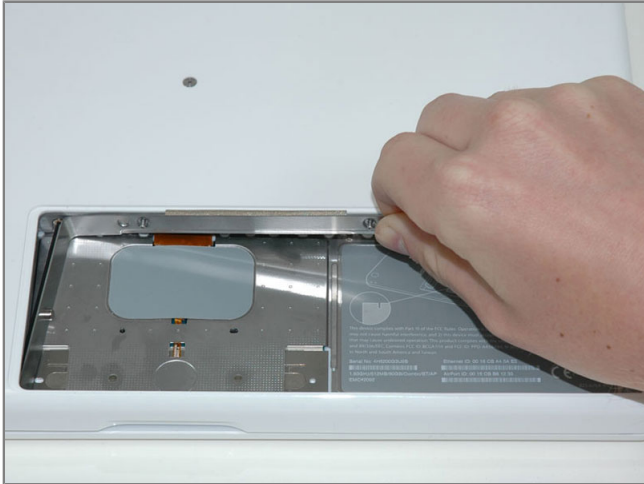
Step 2

- Lift the battery out of the computer.

Step 3 - Memory Cover

- Remove the three evenly-spaced Phillips screws from along the rear wall of the battery compartment.
- The screws are captive to the metal memory cover.

Step 4

- Lift up on L-shaped memory cover, slide it to the right, and lift it out of the computer.

Step 5 - Upper Case

- Remove the following 3 screws:
    - One 11 mm Phillips #00 in the middle of the case.
    - Two 14.5 mm Phillips #00.
- If the screws stick in the case, you can use a magnetized screwdriver to draw them out.
- The shorter of the three screws goes in the middle.
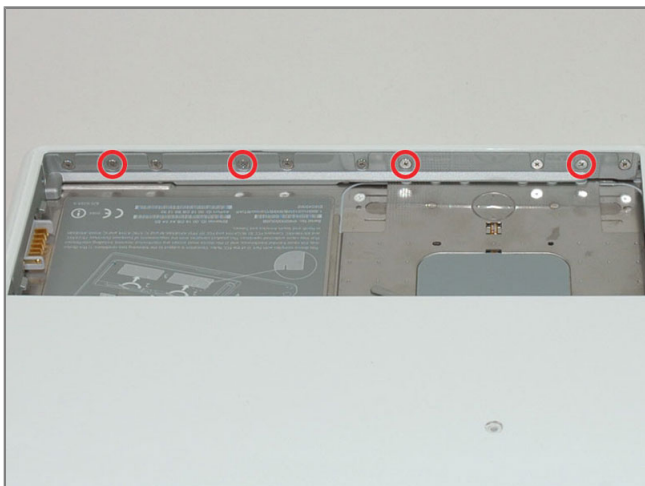
Step 6

- Remove the following 3 screws from the rear wall of the battery compartment:
    - Two 3 mm Phillips #000.
    - One 4 mm Phillips #000 on the right side.
- When reinstalling these screws, it may be helpful to push down on the lower case to line up the screw holes.

Step 7

- Remove the two Phillips #00 screws from either side of the right wall of the battery compartment (not the ones closest to the battery connector).

Step 8

- Remove the four indicated Phillips #00 screws from the front wall of the battery compartment. When working from the left, remove the 2nd, 4th, 7th and 9th screw.

Step 9

- Remove the following 4 screws from the back of the computer:
  - Two 7 mm Philips on the far sides.
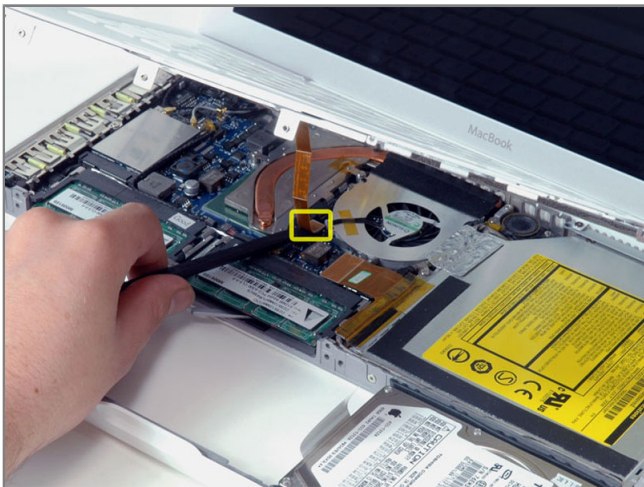 - Two 10.5 mm Phillips toward the center.

Step 10

- Remove the two Phillips #00 screws from the optical side of the computer.
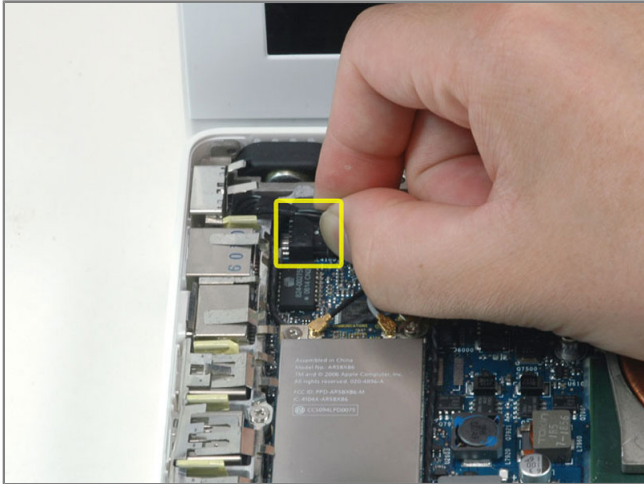- It is not necessary to remove the similar screws on the other side of the computer.

Step 11

- Starting near the display and working around to the front of the computer, pry up on the upper case. It is held with clips on the right above the optical drive. These will release with some firm lifting pressure.
- There's a trackpad and keyboard ribbon connecting the upper case to the logic board, so don't pull the upper case off entirely just yet.
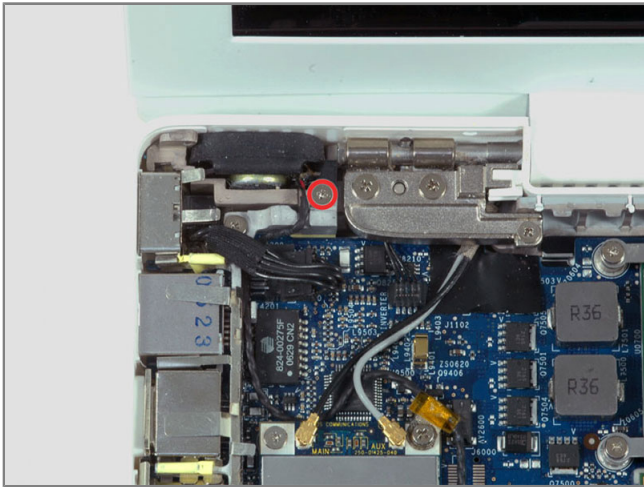
Step 12

- While holding up the upper case, use a spudger to pry up the orange trackpad and keyboard cable from its connector.
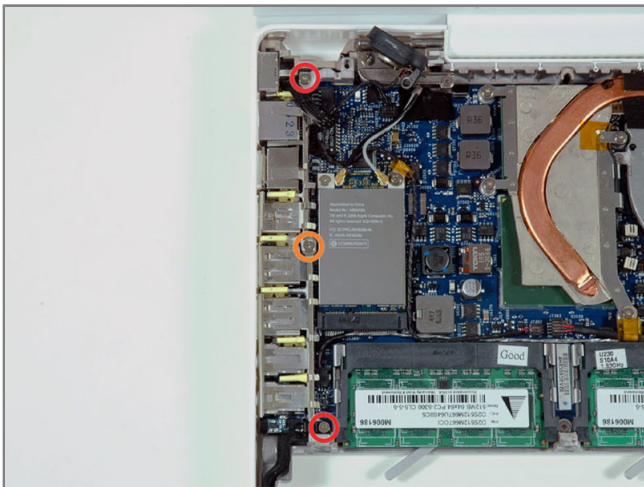
Step 13 - Left I/O Frame

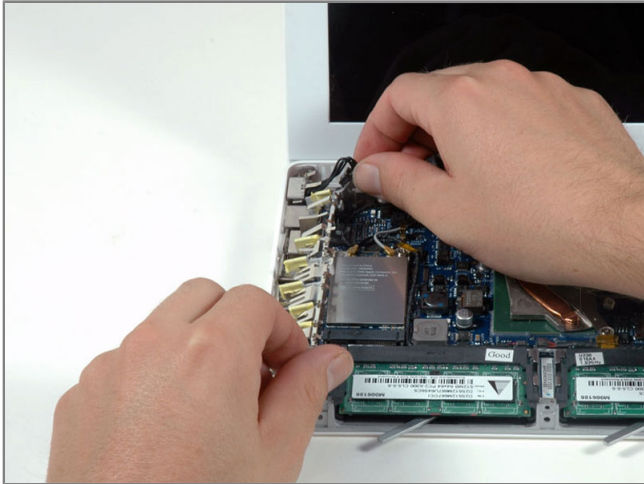- Disconnect the MagSafe board cable from the logic board.

Step 14

- Remove the single Phillips screw securing the left speaker to the lower case.
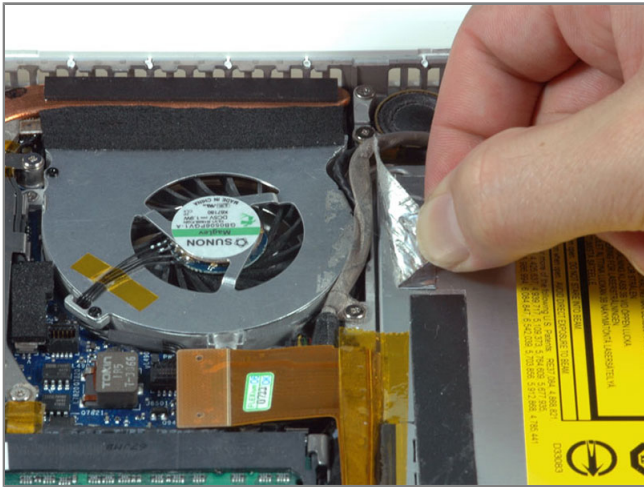- Lift the left speaker out of its housing and set it to the side.

Step 15

- Remove the following 3 screws:
    - Two 7.5 mm Phillips from either end of the left I/O frame.
    - One 9 mm Phillips from the middle of the left I/O frame.
- Remove the small black plastic spacer at the bottom of the left I/O frame.
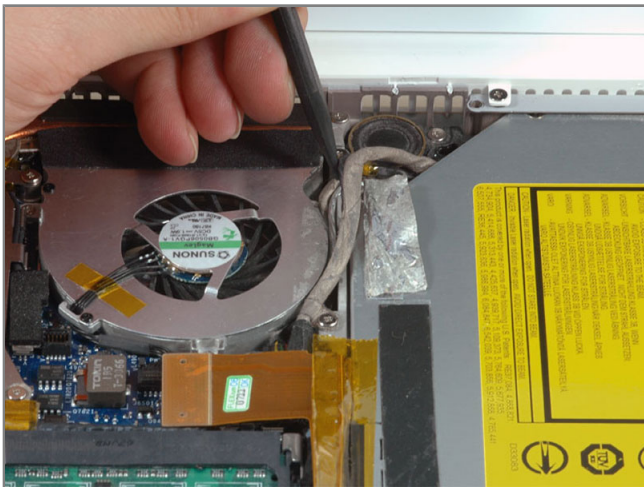
Step 16

- Lift the left I/O frame up and out of the computer. Pay attention to the thin metal EMI fingers, as they may catch as you remove the left I/O frame.

Step 17 - Logic Board

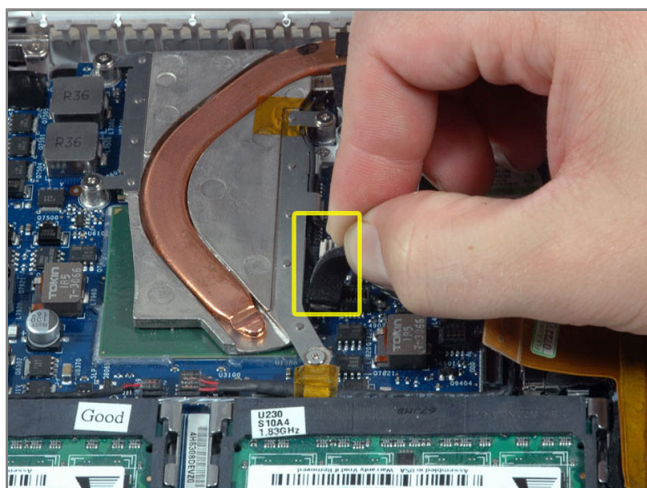- Peel up the foil tape between the fan and the optical drive.

Step 18

- Use a spudger to move the gray display data and black speaker cables to the right. This will reveal a silver screw securing the fan housing to the lower case.
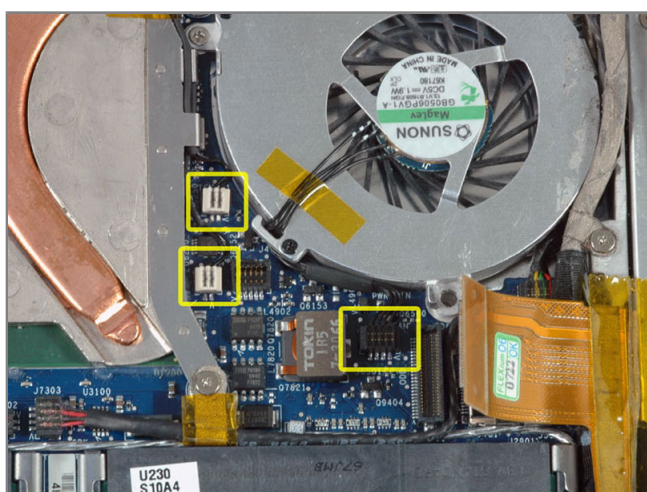
Step 19

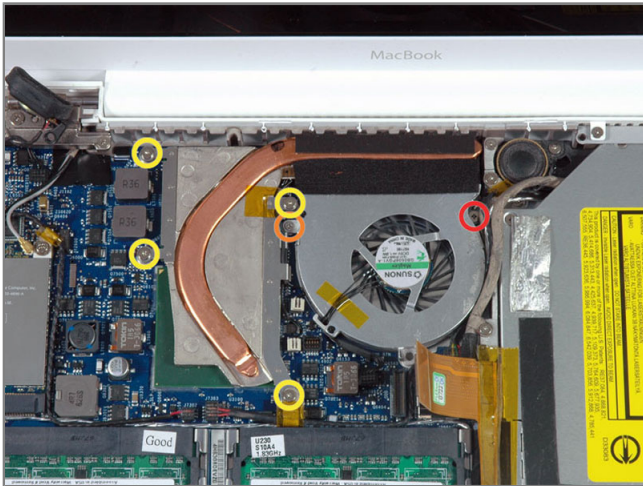- Disconnect the orange optical drive ribbon cable from the logic board.

Step 20

- Peel up the small black rubber cover from the right side of the heat sink.
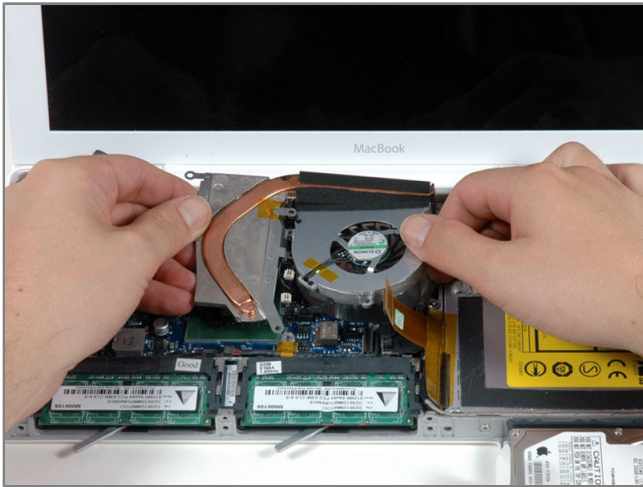
Step 21

- Disconnect the black fan connector and two white temperature sensor connectors from the logic board.
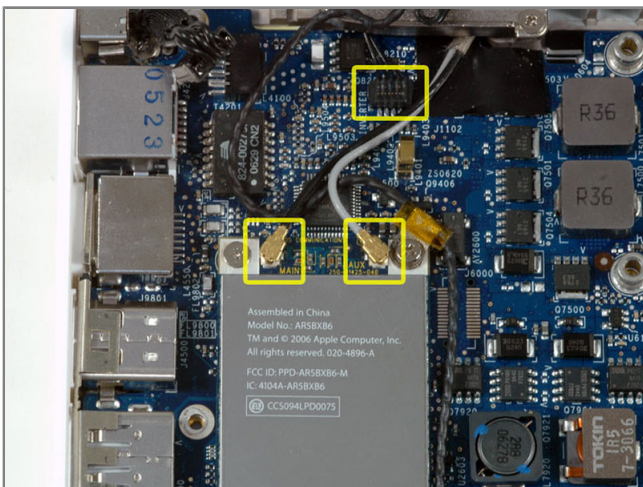
Step 22

- Remove the following 6 screws:
    - One 3 mm Phillips on the right side of the fan.
    - One 6 mm Phillips on the left side of the fan.
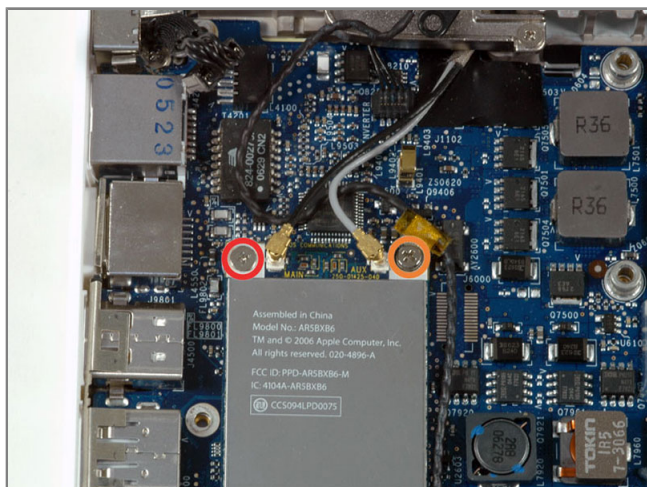   - Four 9 mm Phillips securing the heat sink to the lower case.

Step 23

- Hold the heat sink with one hand and the fan with your other hand, and lift the heat sink and fan assembly out of the computer. The fan is attached to the heat sink only with a strip of black felt tape, so be sure to remove both parts as a unit
- If you need to mount the heat sink back into the laptop, we have a thermal paste guide that makes replacing the thermal compound easy.
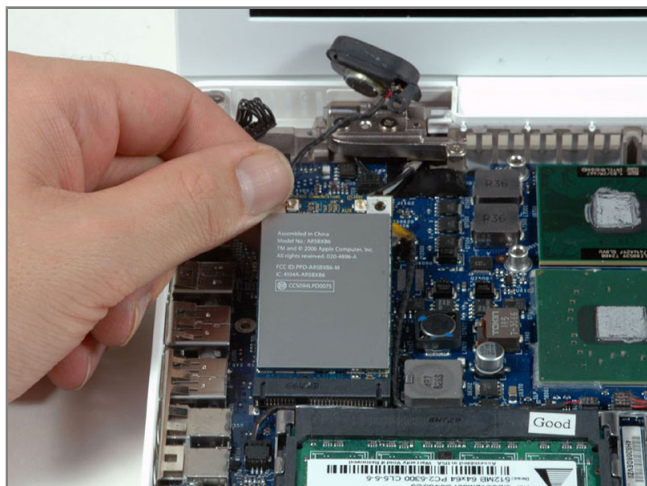
Step 24

- Disconnect the two antenna cables from the Airport card, and the black inverter cable from the logic board.
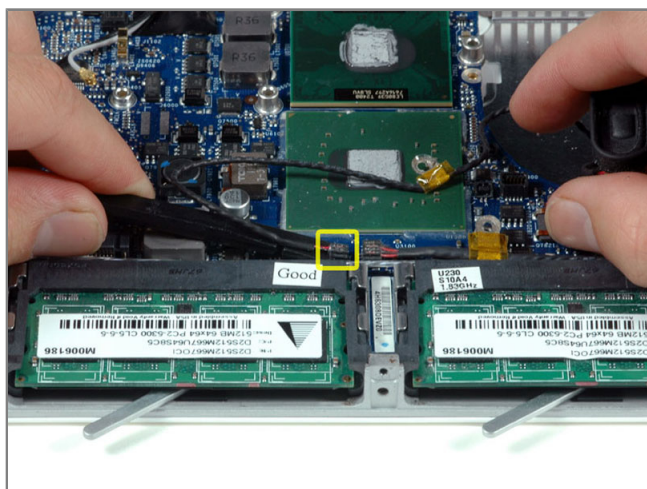
Step 25

- Remove the following 2 screws from the Airport card:
  - One 3 mm Phillips from the left side.
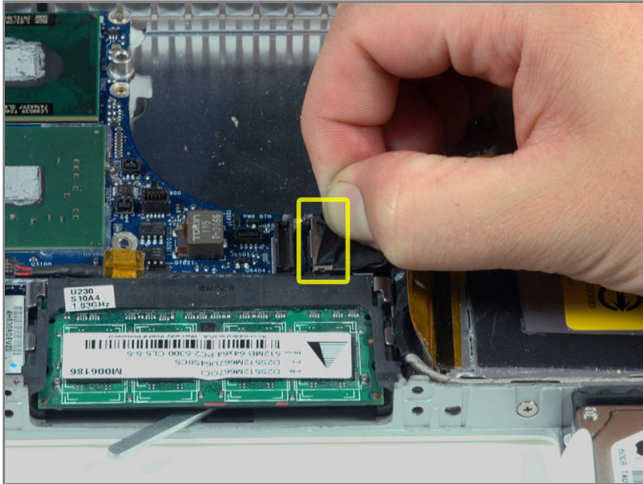 - One 8 mm Phillips from the right side.

Step 26

- Grasp the Airport card at its top and slide it toward the screen and out of the computer.

Step 27

- Use a spudger to disconnect the left speaker connector from the logic board.
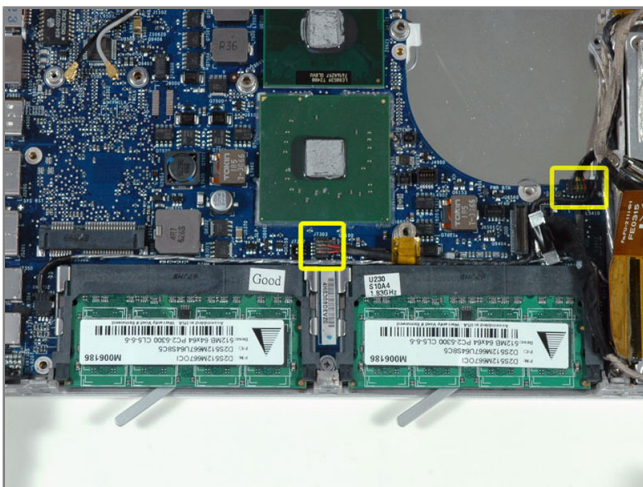- Lift the left speaker out of the computer.

Step 28

- Disconnect the display data cable by pulling up on the black plastic pull-tab. If there is no pull-tab on the top of the connector, it may be helpful to use a spudger to disconnect this connector.

Step 29

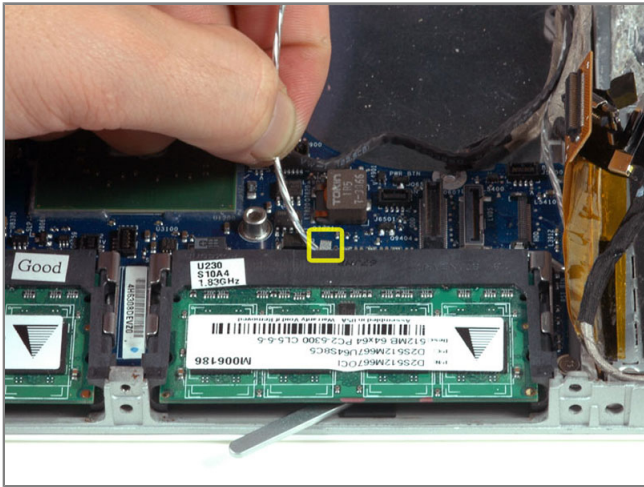- Disconnect the newly-revealed hard drive cable from the logic board.

Step 30

- Use a spudger to disconnect the two speaker connectors from the logic board.
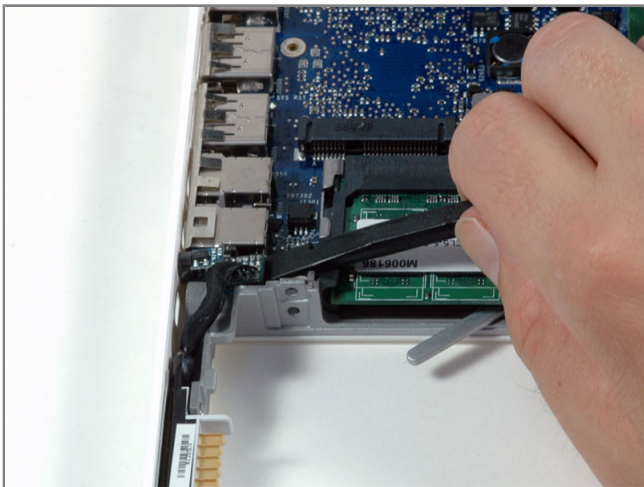
Step 31

- Use a spudger to carefully disconnect the microphone cable from the logic board. You'll want to work from side to side, and slowly wiggle the connector out of its socket.
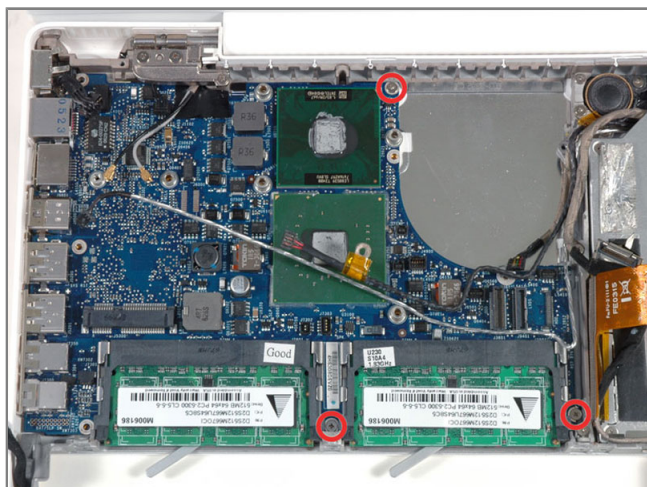
Step 32

- Deroute the silver microphone cable from the silver metal clip just above the right RAM slot.
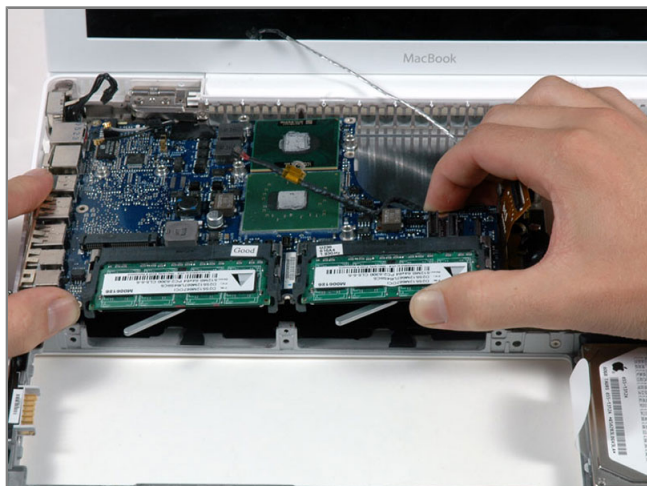
Step 33

- Use a spudger to carefully pry the battery connector up and disconnect it from the logic board.

Step 34

- Remove the three Phillips screws securing the logic board to the lower case.

Step 35

- Lift the logic board up from the right side, and slide it up and out of the computer.

To reassemble your device, follow these instructions in reverse order.

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